

In the claims:

Claims 1-57 (cancelled)

58. (previously presented) A method for determining a decrease in the activity of osteoprotegerin binding protein (OPGbp) comprising: adding a compound to an *in vitro* assay under conditions where the compound binds OPGbp of Figure 4 (SEQ ID NO: 4) or a soluble form thereof; and measuring the activity of OPGbp, wherein a decrease in osteoclast formation in the presence of the compound indicates that the compound decreases the activity of OPGbp.

59. (previously presented) The method of Claim 58 wherein the compound binds to OPGbp of Figure 4 (SEQ ID NO:4).

60. (cancelled).

61. (previously presented) The method of Claim 58 wherein the compound binds to an extracellular domain of human OPGbp comprising residues 69-317 as shown in SEQ ID NO:4 or a fragment thereof.

62. (previously presented) The method of Claim 58 wherein the activity of OPGbp being measured is osteoclast formation.

63. (previously presented) The method of Claim 58 wherein osteoclast formation is measured in a cell culture assay.

64. (cancelled).

65. (previously presented) The method of Claim 58 wherein a decrease in osteoclast formation results in an increase in bone density.

66. (previously presented) The method of Claim 58 wherein the compound increases bone density.

67. (previously presented) The method of Claim 58 wherein the compound decreases bone resorption.

68. (previously presented) The method of Claim 58 wherein the compound is an antibody or binding fragment thereof.

69-70. (cancelled).

71. (previously presented) The method of Claim 68 wherein the antibody or binding fragment thereof is a recombinant antibody or binding fragment thereof.

72. (previously presented) The method of Claim 68 wherein the antibody or binding fragment thereof is a chimeric antibody or a CDR-grafted antibody or binding fragment thereof.

73. (previously presented) The method of Claim 68 wherein the antibody or binding fragment thereof is a human antibody or binding fragment thereof.